

## WHAT IS CLAIMED IS:

1. A protein, comprising an amino acid sequence of SEQ. ID. No. 1, which has the activity of hydrolyzing amylopectin, starch, glycogen and amylose, a derivative thereof, or a fragment thereof.  
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2. A gene of SEQ. ID. No. 2, encoding the protein, the derivative, or the fragment of claim 1, a derivative thereof,  
10 or a fragment thereof.
3. A transformed cell, expressing the gene, the derivative, or the fragment of claim 2.
- 15 4. The transformed cell as defined in claim 2, wherein the cell is prokaryotic or eukaryotic.
5. The transformed cell as defined in claim 3 or 4, wherein the cell is *E. coli* B121(DE3)pLysS deposited with the  
20 accession number of KCTC10573HP.
6. A method of producing an enzyme having activity of hydrolyzing amylopectin, starch, glycogen and amylose, comprising:  
25 culturing the cell of claim 3;  
expressing the enzyme in the cultured cell; and  
purifying the expressed enzyme.

7. An enzyme, produced by the method of claim 6.

8. A composition, comprising the enzyme of claim 7.

5        9. The composition as defined in claim 8, wherein the  
composition is used for dextran removal during sugar  
production.

10       10. The composition as defined in claim 8, wherein the  
composition is used for plaque elimination or as a mouthwash.